

In the Claims:

1. (Currently Amended) An electronic device comprising a free-standing thin film, the thin film comprising an alloy of aluminum and at least magnesium, wherein the magnesium content is at least 0.1 atomic weight percentage.
2. (Previously Presented) An electronic device as claimed in claim 1, wherein the alloy comprises an alloy of aluminum, magnesium and at least one further material.
3. (Original) An electronic device as claimed in claim 2, wherein said at least one further material comprises one or more of copper, manganese, silicon, nickel, chromium, and lithium.
4. (Previously Presented) An electronic device as claimed in claim 1, wherein the Mg content is between 0.1 and 10 atomic weight percent.
5. (Original) An electronic device as claimed in claim 3, wherein said one further material comprises copper in an amount between 0.1 and 8 atomic weight percent.
6. (Previously Presented) An electronic device as claimed in claim 3, wherein the sum of the contents of magnesium, copper and manganese is between 2.5 and 10 atomic weight percent.
7. (Currently Amended) An electronic device as claimed in claim 3, wherein the alloy ~~is chosen~~ comprises an alloy selected from the group consisting of $Al_vMg_wCu_xMn_y$, $Al_vMg_wMn_y$, $Al_vMg_wCu_xSi_{z1}Ni_{z2}$, $Al_vMg_wCu_x$, $Al_vMg_wCu_xSi_{z1}$, $Al_vMg_wCu_xZn_{z3}Cr_{z4}$, $Al_vMg_wCu_xLi_{z5}$, with $80 \leq v \leq 99.8$; and $0.1 \leq w \leq 8.0$, $0.1 \leq x \leq 8.0$, $0.1 \leq y \leq 4.0$ and $z1, z2, z3, z4, z5$ each smaller than 20.

8. (Withdrawn) A method as claimed in claim 11, wherein manufacturing the electronic device comprises:

providing a mechanical layer of material on a sacrificial release layer;
structuring said mechanical layer to define the film; and
removing said release layer to render said film free-standing, wherein the film comprises the alloy of aluminum and at least magnesium.

9. (Withdrawn) A method according to claim 8, wherein said release layer is patterned prior to provision of said mechanical layer thereon.

10. (Previously Presented) An electronic device as claimed in claim 7, wherein z1, z2, z3, z4, z5 are each smaller than 5.

11. (Currently Amended) A method of manufacturing an electronic device comprising forming a free-standing thin film, the thin film comprising an alloy of aluminum and at least magnesium, wherein the magnesium content is at least 0.1 atomic weight percentage.

12. (Withdrawn) A method as claimed in claim 8, wherein the alloy comprises an alloy of aluminum, magnesium and at least one further material.

13. (Withdrawn) A method as claimed in claim 12, wherein the at least one further material comprises one or more of copper, manganese, silicon, nickel, chromium, and lithium.

14. (Withdrawn) A method as claimed in claim 8, wherein the Mg content is between 0.1 and 10 atomic weight percent.

15. (Withdrawn) A method as claimed in claim 13, wherein the one further material comprises copper in an amount between 0.1 and 8 atomic weight percent.

16. (Withdrawn) A method as claimed in claim 13, wherein the sum of the contents of magnesium, copper and manganese is between 2.5 and 10 atomic weight percent.

17. (Withdrawn) A method as claimed in claim 13, wherein the alloy comprises an alloy selected from the group consisting of $\text{Al}_v\text{Mg}_w\text{Cu}_x\text{Mn}_y$, $\text{Al}_v\text{Mg}_w\text{Mn}_y$, $\text{Al}_v\text{Mg}_w\text{Cu}_x\text{Si}_{z1}\text{Ni}_{z2}$, $\text{Al}_v\text{Mg}_w\text{Cu}_x$, $\text{Al}_v\text{Mg}_w\text{Cu}_x\text{Si}_{z1}$, $\text{Al}_v\text{Mg}_w\text{Cu}_x\text{Zn}_{z3}\text{Cr}_{z4}$, $\text{Al}_v\text{Mg}_w\text{Cu}_x\text{Li}_{z5}$, with $80 \leq v \leq 99.8$; and $0.1 \leq w \leq 8.0$, $0.1 \leq x \leq 8.0$, $0.1 \leq y \leq 4.0$ and $z1, z2, z3, z4, z5$ each smaller than 20.

18. (Currently Amended) A MEMS device comprising:
a substrate;
a first electrode at an upper surface of the substrate; and
a second electrode spaced from the first electrode by an air gap, the second electrode comprising a free-standing thin film comprising an alloy of aluminum and at least magnesium,
wherein the magnesium content is at least 0.1 atomic weight percentage.

19. (Previously Presented) A MEMS device as claimed in claim 18, wherein the substrate comprises a body and an insulating layer over the body, the first electrode formed over a surface of the insulating layer, wherein the first electrode is embedded in a passive network that comprises additional components.

20. (Previously Presented) A MEMS device as claimed in claim 18, further comprising a thin film capacitor at a surface of the substrate and laterally spaced from the first electrode.